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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/618,698	07/18/2000	Yuji Sawada	49732-DIV(1117)	8813
21874 7590 03/21/2007 EDWARDS & ANGELL, LLP P.O. BOX 55874 BOSTON, MA 02205			EXAMINER NGUYEN, JIMMY H	
			ART UNIT 2629	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/618,698	<b>Applicant(s)</b> SAWADA ET AL.	
	<b>Examiner</b> Jimmy H. Nguyen	<b>Art Unit</b> 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 July 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 19-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is made in response to applicants' preliminary amendment filed on 07/18/2000. Claims 19-29 are currently pending in the application. An action follows below:

#### ***Information Disclosure Statement***

2. The information disclosure statements (IDS,) submitted on 07/18/2000, 01/28/2004, 04/29/2004 and 06/28/2004, are considered by the examiner. Note that some foreign patent documents BD-BJ listed in the IDS filed on 04/29/2004 are crossed out because these documents were previously cited in the IDS submitted on 01/26/2004 and some foreign patent documents BB-BD listed in the IDS filed on 01/26/2004 are crossed out because these documents were previously cited in the IDS submitted on 07/18/2000.

#### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the features, "element data prepared in units of reproduction is displayed" see lines 1-2 of claim 19, and "the data for high-speed reproduction is displayed", see lines 4-5 of claim 19, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must

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be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 19-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to these claims, these claims recite a reproduction display device (see line 1 of these claims), i.e., an apparatus claim, without setting forth any structural elements involved in the process of reproducing and displaying element data prepared in units of reproduction, dividing data of each element data into data for high-speed reproduction and remaining data, subsequently reproducing and displayed the data for high-speed reproduction once a command for starting high-speed reproduction is given (see independent claim 1), and others recited in claims 20-29. Accordingly, it is not clear that Applicants attempt to claim an apparatus or the method claim.

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Additionally to claim 22, the feature, “a significant bit image produced by a part of bits of each pixel” in lines 2-3 renders the claim indefinite because it is not clear what the applicants mean “a part of bits”, i.e., one bit, 2 bits, 3 bits, or etc..

Additionally to claims 23 and 26, the feature, “a significant bit image related to several significant bits of bit-plane images produced by each bit of each pixel” in lines 2-4 of claim 23, renders the claim indefinite because it is not clear how many bits of each pixel are considered to be significant or insignificant bits.

Additionally to claims 25 and 28, the feature, “the data for high-speed reproduction is **at least one** representative frame image selected from the video data” in lines 2-3 of claim 25, renders the claim indefinite because the specification does not provide how many frame images may be selected from the video data represent for the data for high-speed reproduction, e.g., 10 frame images, 10 frame images, or more.

Additionally to claim 27, the feature, “a magnification **ratio** of the thinned image for high speed-reproduction” renders the claim indefinite because the specification does not define what a magnification ratio is.

Additionally to claim 29, this claim recites “it is further provided with a condition setting means ...” Since it is not clear what “it” is referred to, it is considered the claimed invention is not clearly defined.

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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7. Claims 19-29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As to claim 19, this claim recites “A reproduction display device for reproducing and displaying element data prepared in units of reproduction, wherein data of each element data is divided into data for high-speed reproduction and remaining data and stored respectively and the data for high-speed reproduction is subsequently reproduced and displayed once a command for starting high-speed reproduction is given”. The original disclosure does not fairly describe what element of the display device prepares element data in units of reproduction; what element of the display device divides data of each element data into data for high-speed reproduction and remaining data; what element of the display device stores data for high-speed reproduction and remaining data, what element of the display device reproduces and displays data for high-speed reproduction once a command for starting high-speed reproduction is given; and where a command for starting high-speed reproduction is come from.

Furthermore, the original disclosure does not fairly disclose, “the element data prepared in units of reproduction is displayed” (see lines 1-2 of claim 19) and “the data for high-speed reproduction is displayed” (see lines 4-5 of claim 19). The specification, specially page 1, first paragraph, discloses “The present invention ... an electronic book display control device capable of reproducing electronic image data of a document, and a data structure and a reproduction display device capable of **changing the display image contents at a high speed**”. The specification, specifically page 35, lines 22-25, teaches “Therefore, such data is divided as

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necessary into summary data and remaining data ... The summary data is used to display images of high-speed turning of pages". However, there is nowhere in the disclosure to fairly discuss "the element data prepared in units of reproduction is displayed" and "the data for high-speed reproduction is displayed", as presently claimed.

Accordingly, this claim contains the above underlined features, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As to claims 20-29, since these claims depend upon claim 19, these claims are therefore rejected for the same reason set forth in claim 19 above.

Additionally to claim 20, the original disclosure does not describe what element of the display device compresses the data for high-speed reproduction and the remaining data, as presently claimed.

Additionally to claim 21, the original disclosure does not fairly disclose, "the data for high-speed reproduction is a plane image composed of monochromatic components and the remaining data is a plane image composed of other components" (see lines 2-4). The specification, specifically page 37, line 12 through page 38, line 1, discloses the Y-plane image, e.g., a G-plane image, used as the summary data. However, the original disclosure does not expressly teach what the monochromatic components of a plane image corresponding to the data for high-speed reproduction are and what other components of a plane image corresponding to the remaining data are.

Additionally to claims 23 and 26, the original disclosure does not fairly disclose, “the data for high-speed reproduction is a significant bit-plane image related to several significant bits of bit-plane images produced by each bit of each pixel and the remaining data is remaining bit-plane images of the significant bit-plane image” in lines 2-4 of claim 23. The disclosure does not disclose the remaining data is a part of the data for high-speed reproduction, as claimed.

Furthermore, the disclosure does not fairly disclose how a significant bit-plane image is related to several significant bits of bit-plane images produced by each bit of each pixel.

8. Due to the rejections under 35 USC 112, first and second paragraphs above, Examiner suggests the Applicants to review and/or to rewrite the claims, to take clarify the claimed invention in light of the specification.

9. It is noted applicants that due to the above 112 rejections above, the following art rejections are based as best understood by the examiner.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 19, 20, 24, 25 and 27-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Komatsu (JP 02-023469, cited in IDS).

As to claim 19, Komatsu discloses a reproduction display device (a device shown in Fig. 1B) for reproducing and displaying element data (page information, see page 1 of the submitted partial translation) prepared in units of reproduction (types of information, see page 1 of the



submitted partial translation), wherein data of each element data is divided into data for high-speed reproduction (data for a text file, see page 1 of the submitted partial translation) and remaining data (other types of information such as graphics file and a natural picture file; see abstract), and stored respectively and the data for high-speed reproduction is subsequently reproduced and displayed once a command for starting high-speed reproduction is given (see abstract and the submitted partial translation). Accordingly, Komatsu discloses the claimed limitations.

As to claim 20, the data for high-speed reproduction (character file) is inherently compressed differently from the remaining data (a graphic file and a natural picture file).

As to claim 24, Komatsu discloses that the data for high-speed reproduction is a thinned image produced by omitting a certain number of pixels (a number of pixels corresponding to the graphic image and picture image) and the remaining data is remaining pixels (pixels corresponding to the graphic image and picture image) other than that of the thinned image.

As to claim 25, since Komatsu teaches the data for high-speed reproduction (a character file) processing before the remaining data (a graphic file and a picture file) (see the submitted English translation, page 2, last paragraph), Komatsu implicitly discloses the data for high-speed reproduction is a representative frame image selected from the video data and the remaining data is frame images other than the representative frame image.

As to claim 27, Komatsu discloses a magnification ratio of the thinned image for high-speed reproduction changeable by the operator when receiving and displaying the thinned image reproduced at a high-speed in enlargement (see the submitted English translation, page 1, last paragraph, through page 2, last line).

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As to claim 28, Komatsu discloses a number of representative frames being the data for high-speed reproduction changeable by an operator (see pages 1-2 of the submitted partial translation).

As to claim 29, Komatsu discloses the display device comprising a condition setting means for setting a data classification of the element data and the element data to be reproduced at a high-speed is decided based on conditions set by the condition setting means (see the submitted English translation, page 1, last paragraph, through page 2, last line).

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Komatsu as applied to claim 19 above.

As to this claim, as discussed in the rejection to claim 19, Komatsu discloses data for high-speed reproduction (data for a text file) and remaining data (other types of information such as graphics file and a natural picture file). Accordingly, Komatsu discloses all the claimed limitations except that Komatsu does not expressly teach the data for high-speed reproduction being a plane image composed of monochromatic components and the remaining data being a plane image composed of other components, as presently claimed.

However, Komatsu teaches the data for high-speed reproduction being a text/character image, which is normal in the form of a monochromatic component, and the remaining data

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being a graphic image and a picture image, which are normal in the form of color components.

Accordingly, while Komatsu may not exemplify particular image plane of the data for high-speed reproduction and the remaining data as presently claimed; however, one of ordinary skill in the art would have been found it obvious to make the data for high-speed reproduction being a plane image composed of monochromatic components and the remaining data being a plane image composed of other components, in accordance with a particular application.

14. Claims 22, 23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komatsu, as applied to claim 19 above, and further in view of Yokono (JP 01-108678, cited in IDS).

As to claim 22, as discussed in the rejection to claim 19, Komatsu discloses all the claimed limitations except for the data for high-speed reproduction is a significant bit image produced by a part of bits of each pixel and the remaining data is an insignificant bit image produced by bits other than that of the significant bit image.

However, Yokono discloses that in order to obtain a high-speed reproduction, the data for high-speed reproduction is a significant bit image produced by a part of bits (a most significant bit or two high order bits) of each pixel, and the remaining data is an insignificant bit image produced by bits other than that of the significant bit image (see Abstract and the submitted partial English translation). It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to make the data for high-speed reproduction to be a significant bit image produced by a part of bits of each pixel and the remaining data to be an insignificant bit image produced by bits other than that of the significant bit image, in view of the

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teaching in the Yokono reference, because this would improve the speed of reproduction, as taught by the Yokono reference.

As to claim 23, see the rejection to claim 22 above. Further, Yokono teaches a significant bit-plane image related to several significant bits of bit-plane images produced by each bit of each pixel and the remaining data is remaining bit-plane images of the significant bit-plane image (see page 1 of the submitted partial translation).

As to claim 26, Komatsu in view of Yokono implicitly discloses a number of significant bits of the significant bit-plane image composing the data for high-speed reproduction changeable by a user's designation.

### *Conclusion*

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy H. Nguyen whose telephone number is 571-272-7675. The examiner can normally be reached on Monday - Friday, 6:30 a.m. - 3:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached at 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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JHN

March 15, 2007

A handwritten signature in black ink, appearing to read 'JHN' followed by a stylized flourish.

Jimmy H. Nguyen

Primary Examiner

Technology Division: 2629